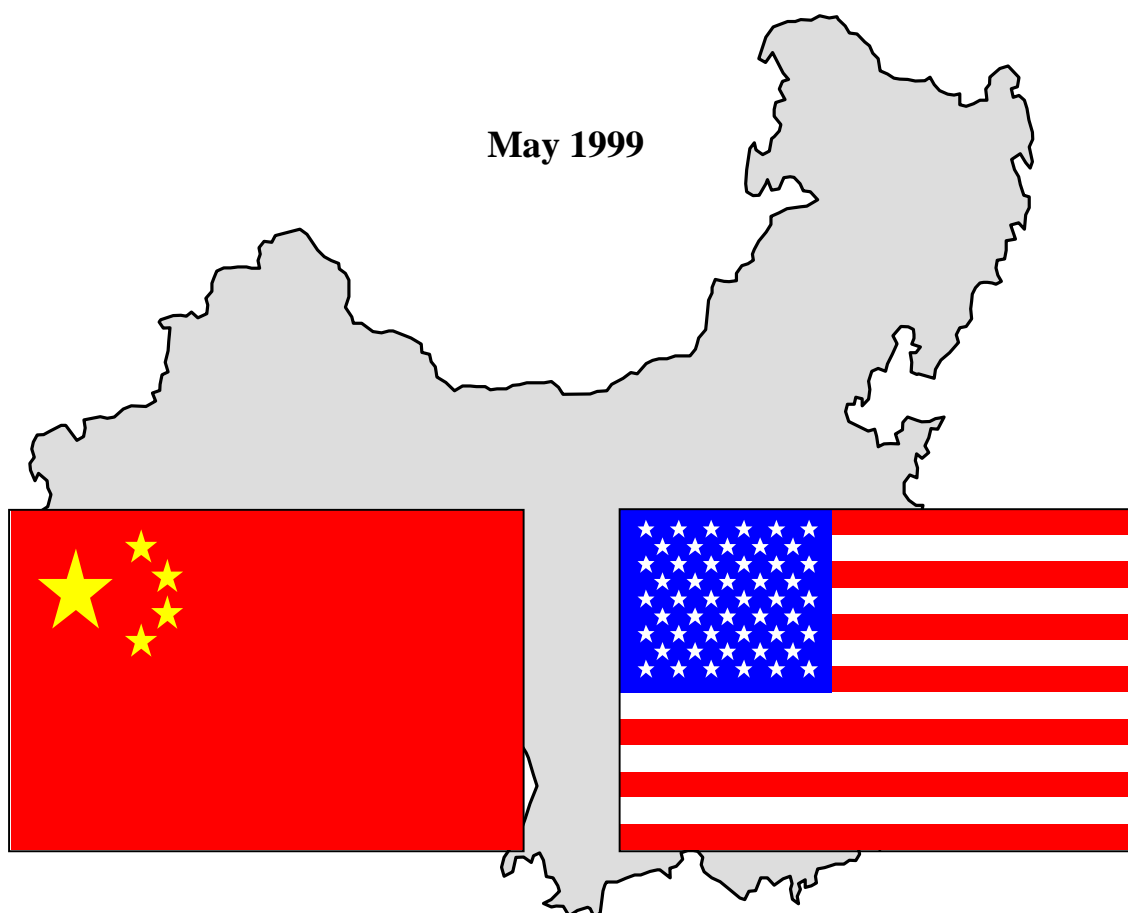


Selected Translated Abstracts of Chinese-Language Climate Change Publications



Institute of Geography
Chinese Academy of Sciences

Atmospheric Sciences Research Center
State University of New York at Albany

Carbon Dioxide Information Analysis Center
Oak Ridge National Laboratory



The citations in this bibliography are separated by the Flora of China logo, which is used with the kind permission of the Editorial Committee of the Flora of China project (<http://www.herbaria.harvard.edu/china/> or <http://www.foc.org/>). The Flora of China is an international collaborative project to publish the first modern English-language account of the approximately 30,000 species of vascular plants of China. The project is a collaboration among the Institute of Botany, Beijing, Kunming Institute of Botany, Jiangsu Institute of Botany, South China Institute of Botany, Harvard University Herbaria, California Academy of Sciences, Smithsonian Institution, Royal Botanic Garden Edinburgh, Royal Botanic Gardens, Kew, and Missouri Botanical Garden. The Flora of China logo, designed by architect Charles Phillip Reay, finds its genesis in the joining of a group of nested leaf forms, all except that of Ginkgo belonging to genera extant in both China and North America. The leaves express the similarities of forests that once covered both lands and symbolize the Sino-American botanical collaboration as represented by the joint production of the Flora of China.

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Chinese-Language Climate Change Publications

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中文气候变化研究论文选摘

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Ge Quansheng, Zhang Peiyuan, Liu Xiuping, Zhang Xueqing, Chen Yuan, Peng Guitang, Zheng Jingyun, W.-C. Wang, R. M. Cushman, and M. D. Burtis. 1999. Selected Translated Abstracts of Chinese-Language Climate Change Publications. ORNL/CDIAC-117. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, Oak Ridge, Tennessee. 369 p.

This report contains English-translated abstracts of important Chinese-language literature concerning global climate change for the years 1995–1998. This body of literature includes the topics of adaptation, ancient climate change, climate variation, the East Asia monsoon, historical climate change, impacts, modeling, and radiation and trace-gas emissions. In addition to the bibliographic citations and abstracts translated into English, this report presents the original citations and abstracts in Chinese. Author and title indexes are included to assist the reader in locating abstracts of particular interest.

葛全胜, 张丕远, 刘秀萍, 张雪芹, 陈媛, 彭桂堂, 郑景云, 王维强, 罗伯特·M·卡斯曼, 马伟尔·D·博帝斯, 1999, 中文气候变化研究论文选摘, ORNL/CDIAC-117, 美国奥克瑞奇国家实验室CO₂信息分析中心, 共369页。

本文摘收集了有关学者在1995-1998年间以中文发表的全球气候变化主要研究论文。

内容涉及: 古气候变化, 历史气候变化, 现代气候变化, 东亚季风, 气候变化的影响, 气候变化的模拟, 痕量气体排放与辐射, 全球气候变化的适应对策等8个方面。本文摘以中英文对照形式编排, 同时刊出这些论文的中英文摘要以及论文出处。为方便读者, 本文摘的最后部分还列出了作者与文章名的索引。

Introduction

On 19 August 1987, the U.S. Department of Energy and the People's Republic of China's Academy of Sciences signed Annex III to the Protocol on Fossil Energy Research and Development on Cooperation in the Field of Atmospheric Trace Gases. This formal agreement followed two years of informal scientific exchanges to further research on the global and regional climate changes that could result from fossil-fuel combustion. Research under the agreement comprises four tasks: (1) analysis of climate models; (2) preparation and analysis of paleo-, historical, and modern instrumental climate data; (3) comparisons between model output and data to study the relationship between large- and regional-scale climate; and (4) measurement of emissions to the atmosphere from rice paddy fields. The background to this agreement and progress resulting from the joint research program are described by Koomanoff et al.¹ and Riches et al.²

Whereas much of the Chinese literature on climate change, including that resulting from the bilateral agreement, is available in English to western researchers (e.g., Zhang³), other important Chinese-language literature is not. The purpose of this compilation is to acquaint western climate researchers with the wealth of recent Chinese climate-change literature by providing translations into English of the abstracts of Chinese-language literature (published between 1995 and 1998), in the areas of adaptation, ancient climate, climate variation, the East Asia monsoon, historical climate change, impacts, modeling, and radiation and trace-gas emission.

On behalf of the Carbon Dioxide Information Analysis Center (CDIAC) at Oak Ridge National Laboratory, the Atmospheric Sciences Research Center (ASRC) of the State University of New York at Albany, and the Institute of Geography of the Chinese Academy of Sciences, we thank Fred Koomanoff and Mike Riches of the U.S. Department of Energy, Office of Energy Research, who developed and directed the joint agreement on behalf of the United States; Zhao Jianping of the Chinese Academy of Sciences, who developed and directed the joint agreement on behalf of the People's Republic of China; and Linda O'Hara of ORNL Publishing Services, who edited the English-language abstracts in this report.

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May 1999

¹ Koomanoff, F. A., D. Ye, J. Zhao, M. R. Riches, W. -C. Wang, and S. Tao. 1988. The United States Department of Energy and the People's Republic of China's Chinese Academy of Sciences Joint Research on the Greenhouse Effect. *Bull. Am. Meteorol. Soc.* 69:1301-08.

² Riches, M. R., J. Zhao, W. -C. Wang, and S. Tao. 1992. The United States Department of Energy and the People's Republic of China's Academy of Sciences Joint Research on the Greenhouse Effect: 1985-1991 Research Progress. *Bull. Am. Meteorol. Soc.* 73:585-94.

³ Zhang, X. -H. 1990. Dynamical framework of IAP nine-level atmospheric general circulation model. *Adv. Atmos. Sci.* 7:67-77.

1987年8月19日,美国能源部与中国科学院签署了《化石能源研究与发展协定》第三个附件“大气痕量气体领域合作研究备忘录”。其后两年,随着双方在化石燃料燃烧导致的全球与区域气候变化研究领域的交流与合作研究不断深入,双方签署了正式的合作研究协议。该协议的研究内容包括:(1)气候模式的诊断分析;(2)古气候资料、历史气候资料及现代气候资料的整理与分析;(3)全球与区域的气候关系及模式结果与资料之间的对比分析;(4)稻田排放监测。有关该协议的背景、细节与其它合作研究进展,Koomanoff等¹和 Riches 等²已有另文论述。

虽然已有一些中文的气候变化研究文献,包括上述协议的合作研究成果,已被译成可供西方学者参阅的英文(如张学洪³,1990),但其它的大部分同类研究仍主要以中文发表。编辑本文摘的主要目的是:通过编译1995-

1998年间以中文发表的全球气候变化(特别是古气候变化,历史气候变化,现代气候变化,东亚季风,气候变化的影响,气候变化的模拟,痕量气体排放与辐射,全球气候变化的适应对策等)主要研究论文摘要,让西方的气候变化研究学者能够全面了解中国的气候变化研究进展,进一步促进中西方的学术交流。

在此,我们代表美国奥克瑞奇国家实验室环境科学部CO₂信息分析中心,美国纽约州立大学奥尔巴尼校区大气科学研究中心和中国科学院地理研究所,对美国能源部能源研究办公室的Fred Koomanoff 和 Mike Riches(倡议并签署上述合作协议的美国代表),中国科学院的赵剑萍(倡议并签署上述合作协议的中国代表),ORNL出版社的Linda O'Hara(本文摘的英文责任编辑)表示感谢。

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境科学部CO₂信息分析中心

一九九九年五月

¹ Koomanoff, F. A., D. Ye, J. Zhao, M. R. Riches, W. -C. Wang, and S. Tao. 1988. The United States Department of Energy and the People's Republic of China's Chinese Academy of Sciences Joint Research on the Greenhouse Effect. Bull. Am. Meteorol. Soc. 69:1301-08.

² Riches, M. R., J. Zhao, W. -C. Wang, and S. Tao. 1992. The United States Department of Energy and the People's Republic of China's Academy of Sciences Joint Research on the Greenhouse Effect: 1985-1991 Research Progress. Bull. Am. Meteorol. Soc. 73:585-94.

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广州热带海洋气象研究所主办
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国际刊号: Q4099
1. *Acta Meteorologica Sinica**
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CN 11-2006/P
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(started in 1976, bimonthly)
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《干旱区地理》编辑部出版

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国际刊号: Q4667

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CN 21-1253/Q

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科学出版社出版

国内刊号: ISSN 1000-3134

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(1994 年始, 季刊)

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国内刊号: ISSN 1005-2321

CN 11-3370/P

24. Earth Science Frontiers

(started in 1994, Quarterly)

Sponsored by China University of Geosciences

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25. 气象科学

(1982 年始, 季刊)

江苏省气象学会主办

25. Scientia Meteorologica Sinica

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*中文核心期刊。

*Core journals in Chinese